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Abstract

The invention relates to a device for generation of microwaves comprising a virtual cathode oscillator (1) in a coaxial embodiment with an outer cylindrical tube forming a cathode (2) and connected to a transmission line (14) for feeding the cathode (2) with voltage pulses, and an inner cylindrical tube, at least partially transparent for electrons, forming an anode (3) and connected to a waveguide (13) for outputting microwave radiation generated by the formation of a virtual cathode (4) inside an area enclosed by the anode. Through the introduction of electrically conductive structures (5 and 6) a device for generation of microwaves is achieved that demonstrates higher efficiency and higher peak output.

20 (Figure 3 is proposed for publication)